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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
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IN REPLY REFER TO:
3590
UTU-72699
(UT-920)

CERTIFIED MAIL--Return Receipt Requested

Mr. James Lekas
Lexco, Inc.
P.O. Box 1198
582 North Vernal Avenue
Vernal, Utah 84078

Re: Clarifications and additional information needs regarding the combined deficiencies to the 3 shaft mining plan modification dated 9/1/2004, Federal Gilsonite Lease UTU-72699

Dear Mr. Lekas:

Modification of Mining Plan Approval

Background-The Bureau of Land Management (BLM) Utah State Office, received your Mining plan modification on September 16, 2004. BLM and the Utah Division of Oil, Gas and Mining (DOGM) are combining their responses to your proposed action. This letter contains a list of deficiencies that need to be corrected prior to granting an approval from the respective agencies involved. NEPA can not be addressed until an adequate plan has been submitted.

Deficiencies-

1. Figure 1- The mine maps submitted to BLM for production verification show the center lines of the shafts at 1282 feet apart. Figure 1 of the plan shows the shafts at 1000 feet apart. The maps need correction.

2. Figure 2 - Figure 2 shows all shafts about 1000 feet apart versus 1282 (From Shaft #1 to Shaft #2) and 1200 feet on the remainder of the shafts. This brings into question the locations of the drill holes and the quantities of the reserves.

3. Figure 3, Road-The calculated amount of road that is in the proposal Figure 3 is different that what the plan states. This discrepancy needs to be resolved. This also means that the amount of disturbance is incorrect.

4. Figure 3, Disturbed Area - The disturbed area does not include the shaft. BLM recommends that the disturbed area be updated to include all areas that may be utilized in the production of Gilsonite. The waste pile is usually on the opposite side of the shaft.

5. Figure 3 - Your plan states that #3 Shaft is 1200 feet east of the #1 Shaft. This does not agree with Figure 3 (which shows the shaft 1240 feet east of shaft 1. On figure 3 the location of the #4 shaft is correct at 1200 feet west of shaft #2. Figure #1 does not show shaft #5. The location of shaft #5 should be shown on Figure 3 because of the scale of the map. All other maps should be corrected to indicate the changes.

6. Figure 4 - Figure 4 only shows about 1260 feet from Shaft #1 to Shaft # 2 and only 1000 feet from shaft #2 to Shaft #4 (not the 1200 feet that is stated in the text). The distance from shaft #1 to shaft #3 is less than 1000 feet (not the 1200 feet that is stated in the text).

7. Figure 5, Escapeway- Figure 5 does not show an escape way on Shaft #5.

8. The plan needs to discuss how deep you plan to strip the soil. If some soil is stock piled, the plan must address the size of the pile and how you will stabilize the pile. The proposed seed mix would be as follows:

1 lb. /acre Wyoming Big sage (*Artemesia tridentata* ssp. *wyomingensis*)
3 lb./acre Shadscale (Atriplex confertifolia)
4 lb./acre Indian Ricegrass (*Achnatherum hymenoides* formerly *Oryzopsis hymenoides*)
4 lb./acre Scarlet globemallow (*Sphaeralcea coccinea*)

The above quantities apply if the seed is broadcast and walked into the soil with a dozer, or if the seed is drilled. If the seed is broadcast and dragged with a chain or hand-raked into the soil the seed mix quantity should be doubled.

(The stock pile should not exceed 6 feet in height. The slope should be no greater than a 2-1.) Shaft location #4 is shown on soils that contain a high amount of clay and salt. There was a discussion on moving this location of this shaft about 150 feet to the northwest. If this is still your desire this change should be incorporated into the plan.

9. The plan should give more details on the re-vegetation part of the plan. A reclamation schedule is required indicating when each activity will commence after the need for the shaft is finished. Since the dates are unknown the plan should address the following items in a proposed time frame: The plan currently address that after completion of operations all equipment will be removed. The modification needs to discuss the time periods that will be involved with equipment removal, contouring and reseeding. It is recommended that the seed be placed directly between about October 1 and December 1 and directly after the final scarifying of the ground.

The method of re-seeding should be addressed. The current plan address the fact that the final seed mix will be obtained from BLM. The modification should address the fact that the seed will be pure live seed and weed free. The current plan states that the surface will be raked. This method by itself may not be sufficient because of the compaction that has taken place. BLM requests that the method of scarifying be changed to ripping, disking or some other appropriate method and that raking can be done after broadcast seeding.

The plan should be definite on the amount of disturbance for both the mine site and the road. The road width may be 18 feet but the disturbed area may be larger especially if MSHA requires berms along the roads traversing the drainages.

10. The plan should include a plan view sketch of the shaft and compartments.

11. The plan addresses some generic equipment/facilities. The plan should be updated to include the containment around the diesel tanks and any other equipment that is not listed in the plan.

12. The NPDES discharge point #0025259 should be shown on one of the figures. Lexco is required to discuss if they have a blanket permit to continue to discharge mine water under the existing EPA NPDES permit (even when moving onto new shaft locations) or whether they will need to apply for separate permits from any of the three proposed new shafts. The lessee needs to commit to advising the BLM when changes in the location(s) of water discharge occur and to provide the BLM updates regarding quality and quantity (and depth of in-flow) of water being discharged.

13. The plan should be revised to better address the closure of the shafts. The closure of the shafts must include taking the collars out above the ground level and placing the cap at least 2 feet below the ground surface. The cap overlap should be 2 feet (or about the width of the vein) on each side which ever is more. The cap should be a minimum of 2 feet thick with appropriate steel reinforcing. The cap should be placed on solid, un-weathered rock. Concrete should go down the along the vein least 3 feet from the bottom of the cap. All final designs will be submitted and approved by BLM prior to sealing of the shaft.

14. BLM requires a spill plan. This discussion addresses and what will be done if a spill of motor oil, grease, antifreeze, or hydraulic fluid takes place, and how the contaminated material will be disposed of.

15. Because the road crosses drainages, the plan should contain a discussion of the type of drainage crossing (culvert or a dry drainage crossing) that will be used. The Surface Operating Standards for Oil and Gas Exploration and Development ("Gold Book") can be referenced. A dry drainage crossing is recommended for ease of maintenance. The lessee needs to provide more information about the construction technique (and reclamation measures) where the proposed access road will cross 2 intermittent drainages (one about 250' northwest and the other 1800' west-northwest of mine site #2.)

16. Drilling: The timing of the drilling needs to be discussed along with the equipment that would be utilized, diameter of the hole and if water will be used. If water would be used there should be a discussion on the estimated quantity and source [by permit number] of the water, whether a tank would be used or a pit [with dimension], with a discussion of plugging procedure(s), reclamation and access. The lessee may use the former plan that has been approved but it needs to be included in this plan. All drill holes must be plugged in accordance with the Utah Division of Oil, Gas and Mining regulations. Prior to plugging BLM should be notified as to the plugging.

17. In lieu of the first sentence on page 6, 4th paragraph, the standard [negative] hazmat declaration statement should be used (like Lexco did in their April 12, 2001 supplemental drilling plan; p. 7, item 9.d.)

18. Hazards to Public Safety. All pits have been closed. There is no exploration that is approved to open any new exploration pits. The 2nd and 3rd sentences in this section of the plan are confusing given the facts. These should be deleted or the plan should address any new pits that are required for this modification.

19. The plan should discuss the proposed length of time that the mining should last for this proposal. NEPA will require the most likely action to transpire after the mining of the 3 shafts. This may include operations ceasing, moving to a new on-lease location, or moving to a new lease.

20. Lexco should discuss if the production shifts to the proposed #3 and #4 mine sites, and whether or not the #1 and #2 mine sites would be reclaimed. The timing for reclamation of the #1 and #2 shafts should be reflected in the reclamation schedule. Ideally, BLM would prefer that the reclamation of the #1 and #2 mine site, as production is shifted to the proposed #3 and #4 mine sites (excepting for continued use of the existing constructed roads that go by the 1 and 2 mine sites to the proposed new shafts.)

21. The lessee needs to update the plan for control of noxious weeds stating that they will control noxious weeds that are listed by the Utah BLM*, the State of Utah Dept. of Agriculture** and Uintah County***.
* http://www.blm.gov/utah/resources/weeds/weed5.htm
** http://ag.utah.gov/plantind/nox_utah.html
*** http://www.vernal.com/may30/legal.html

For further information contact Mr. Stan Perkes, (801) 539-4036.

Sincerely,

JAMES F KOHLER

James F. Kohler
Chief, Solid Minerals Branch

bcc: Vernal Field Office
Utah Division of Oil, Gas, and Mining (Attn. Paul Baker) P.O. Box 145801, Salt Lake City, Utah, 84114-5801
Mine Files - UTU-72699

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From EA 1986-77

raptors present are the golden eagles, prairie falcons, and red-tailed hawks. Development activities in close proximity to a nest site during the critical reproductive period may cause nest desertion or abandonment.

Portions of this application area are considered to be mule deer winter habitat. Construction of mining sites and the associated haul roads will eliminate mule deer habitat as well as cause additional human harassment of the animals through improved access.

No wild horses are present in this area.

C. COTTONWOOD GROUP

1. Cultural Resources

This group of leases is adjacent to the southern boundaries of the Natural Buttes and Seep Ridge statistical study areas. The results of these studies are applicable to these leases because of topographic and environmental characteristics. Cultural resource inventory recommendations are made using these studies as guidelines. Application of sets of environmental variables that are important for locating cultural resources are the primary basis for archaeological inventory recommendations. To date, no archaeological sites are known on these leases. Areas previously inventoried or that have been disturbed will not be inventoried, all other areas will be inventoried.

2. Geology and Minerals

a. Geology

The Cottonwood group of applications is located in the west-central part of the Uintah Basin (Cashion 1967). The basin lies within the Colorado Plateau Physiographic Province. The area is overlain by the Tertiary age Uinta formation. The structure of this formation is homoclinal with a gentle north-northwest dip of 2 to 5 degrees. It exhibits gentle folding along a northwest axis. A notable structural feature is a system of parallel, northwest trending, vertical to near vertical fractures filled with gilsonite (also called gilsonite veins or vein systems). This solid hydrocarbon (also called asphaltite) is a residue of natural petroleum. It has been identified as occurring in fractures within the Uinta formation and the underlying Tertiary age Green River and Wasatch formations (Cashion 1967).

The topography consists of a generally northwest trending, flat to hilly bench which is dissected by washes and

intermittent streams. Elevations range from 5300 feet at the middle and northwest end of the area to 5720 feet in the very southeastern application area. The dominant feature is Sand wash which trends north-south and splits the application areas in two.

b. Minerals

(1) Leasables

(a) Oil and Gas

All the Cottonwood group is within the Greater Uinta Basin KGS. The Love (gas) Unit encompasses 40 acres of the application areas. The area is identified in the Book Cliffs RMP (BLM 1984) as being in an area with a favorable environment for oil and gas.

(b) Oil Shale

The northwestern portion of the application areas lie within a Known Oil Shale Leasing Area (KOSLA). The entire area was placed under protective withdrawal subject to valid existing rights by Executive Order, modified by a public land order, for the investigation, examination, and classification of oil shale.

(c) Gilsonite

Two gilsonite veins (unnamed but referred to by some companies as the Cottonwood and Cottonwood West) are known to outcrop or project through the application areas. Hydrocarbon Resources Co. has a mine just to the northwest of the application areas on one of the gilsonite veins. Several shafts are mapped on the same vein about one mile farther northwest. Ziegler Chemical and Mining Corp. operates a non-Federal gilsonite mine in this area at the present time.

(d) Sodium

The oil shale withdrawal in (b) above excludes this area from sodium leasing, subject to valid existing rights.

(2) Saleables

The Book Cliffs RMP does not designate any potential sand and gravel or building stone sites in the

Cottonwood area. The few washes in the area may contain alluvium, but are likely to be of inferior quality and quantity and too distant from markets to be commercial.

(3) Locatables

According to BLM records, there are uranium lode claims locations which overlap application areas in Sections 4, 5, and 9, T. 11 S., R. 22 E. (BLM records, as of February 26, 1986). These mining claims were staked in 1955. This was before a 1968 Public Land Order closed the oil shale withdrawal area to metalliferous entry. Uranium has been designated as a metal in a 1954 solicitor's opinion. Therefore, these claims are properly located, but have not been examined to prove a discovery or lack of discovery of a valuable mineral. Leasable and locatable minerals may be developed in the same area in accordance with the Multiple Mineral Development Act. (P.L. 585). An Executive Order, as modified by a public land order, withdrew the oil shale area in (b) above from mineral entry under the mining law, subject to valid existing rights.

There are uranium lode mining claims in Sections 4, 5, and 9, T. 11 S., R. 22 E. of U-54608 which can still be explored (under 43 CFR Group 3800) and the leasable mineral gilsonite developed (under 43 CFR Part 3550) in the same area in accordance with the Multiple Mineral Development Act (P.L. 585).

3. Range

The proposed leases in this area are found in various desert, semi-desert, run-in, and badland ecological sites, with the latter of the sites supporting the least of the vegetation. The majority of the area consists of the mixed-desert shrub type vegetation. Major shrub species found are: shadscale, budsage, big sagebrush, rabbitbrush, and black sagebrush. The most common grasses are galleta grass, western wheatgrass, Indian ricegrass, squirreltail, and sand dropseed. Forb species will include scarlet globemallow, longleaf phlox, and numerous annuals.

4. Recreation

There are no wilderness study areas, areas of critical environmental concern, natural areas or developed recreation facilities located on the proposed lease tracts. Recreation constitutes only a secondary land use in this area. The only significant activity is some hunting for rabbits during the

winter months and antelope in the fall. ORV use in the area is very minor and usually associated with hunting and oil/gas production.

Visual Resources:

The VRM class is IV (least restrictive and where changes may attract attention) and comprised of class C (low quality) scenery, low sensitivity (degree of concern for scenery or scenery modification) and middleground/seldom seen visual zones.

The landscape character consists of terrain with low undulating hills with a few rock outcrops and shallow drainage basins covered by low shrub vegetation. Rock and soil colors range from muted buff to gray tones. Visible man-made structures consist of access roads to producing oil/gas wells and production gas pipelines laid on the surface.

The proposed gilsonite lease areas would generally not be visible from any major travel route.

5. Soils

Soils in the Cottonwood Group applications range from shallow to very deep with surface soils from extremely stony loam to loam. Slopes are from 2 to 50 percent. Subsoils have moderate to strong alkalinity. About six percent (90 acres) of the lease area has high water erosion hazard.

About 35 percent of the soils are shallow, about 50 percent are deep or moderately deep and about 15 percent is Badland or Rock Outcrop. Badland consists of steep, eroding, barren non-producing land.

Sediment yield from the application area is moderate producing 0.5 to 1.0 acre foot per square mile per year. Total sediment production from the unit is about 1.1 to 2.25 acre feet or 2,080 to 4,160 tons of sediment annually (soil weight 85 lbs. per cubic foot = 1,851 tons per acre foot). Revegetation of disturbed shallow soils may be very difficult due to low water supplying capacity and alkalinity.

6. Threatened and Endangered Species

(Wildlife)

No threatened or endangered wildlife species are known to exist in the Cottonwood Group application area.

(Plants)

There are no presently known threatened, endangered, or sensitive plant species occurring on any of the lease application areas in the Cottonwood Group Area.

7. Water

The Cottonwood Group is characterized by steep, narrow canyons which feed into the intermittent streams of Sand and Cottonwood Washes. Sand Wash intersects the application area. Both washes drain north into the White River.

Most runoff occurs during the spring and early summer and is produced by melting of the winter snowpack. Average annual precipitation for the area is 8 to 12 inches. During the late summer months, high intensity, short duration thunderstorms may cause high runoff events and local flooding.

Ground Water

Minor drainages such as Sand Wash may contain an alluvial aquifer but their areal extent is small. Thickness of alluvial valley fill probably is less than 30 feet thick. Due to the low amount of precipitation falling on the area, probably most recharge occurs from stream infiltration and is consumed by phreatophyte vegetation and through evapotranspiration.

Unconsolidated ground water information is limited in this area. However, discussion of potential aquifers that should be present in this group can be found in the Canyon Country Group IV. B. 7. Ground Water.

8. Wildlife and Wild Horses

The Cottonwood Group application area contains essential habitat for the East Bench antelope herd unit, established in 1983. The area is used as year-round habitat, primarily for foraging and cover, but may also serve as fawning habitat.

This area is also habitat for an unknown number of sage grouse. Grouse occur on the area year-round, but are probably most common during winter months.

Raptors are common in this area. Most prevalent are golden eagles, red-tailed hawks, and prairie falcons. One known aerie is located adjacent to the application boundary. It is not currently active but has been active in recent years.

One small band of wild horses (approximately seven animals) is occasionally observed on this area. These animals are also scheduled for removal during the 1986 round-up.